

Carbon Sequestration Agreement Application Guidelines

This guide outlines the application requirements for a Carbon Sequestration Agreement

Overview

In December 2021, the Government of Alberta issued the first of two Request for Full Project Proposals (RFPP), which encouraged companies to demonstrate their interest in building, owning, and operating carbon sequestration hubs in Alberta's Industrial Heartland. In March of the subsequent year, the Province then issued the second RFPP for areas outside of the Industrial Heartland. This process led to successful applicants being awarded a Carbon Capture, Utilization and Sequestration Evaluation Agreement (Evaluation Agreement) to undertake activities to evaluate the suitability of the proposed hub area for carbon sequestration. Upon completing the evaluation, applicants are required to submit an application for a Carbon Sequestration Agreement (Sequestration Agreement). A Sequestration Agreement will outline the rights, responsibilities, and requirements an agreement holder must abide by to operate a carbon sequestration hub within the Province of Alberta. Applicants that meet Alberta Energy's the Department's application process requirements will be granted a sequestration agreement.

Requirements

There are four categories of requirements for the Carbon Sequestration Agreement Applications:

1. Application Form
2. Hub Development Plan
3. Technical Evidence to Support Land Area Requested
4. Spatial Data Format

Alberta Energy will review the applicant's submission to ensure sufficient information is provided. In the event a submitted application is incomplete, Alberta Energy will reject the application. Applicants can reapply once all required information is available.

Application Form

Applicants must complete a Carbon Sequestration Agreement Application Form as part of their submission.

The form includes six sections:

- Administrative Information
- Application Type
- Application Requirements
- Requested Lands and Formation
- Submission Instructions
- Signature and Contact Information

Hub Development Plan

As part of the application, applicants are required to provide a Hub Development Plan consisting of the information included in the Hub Development Plan Detailed Information Requirements document (Detailed Information Requirements document). This document requires applicants to provide updated components from the original RFPP submission, as well as new requirements to support the sequestration application. Applicants will use the Hub Development Plan template to provide the necessary information outlined in the Detailed Information Requirements document. The applicant must submit a complete Economic Evaluation Template, which includes information on total tonnes

of CO₂ for injection and individual emitter facility tonnes of CO₂ for injection, service rates (in real dollars) and costs (in real dollars) based on the operator's best estimate for the lifetime of the project until the end of the closure period. A Class 3 cost estimate is required in accordance with international standards (ACEC International Recommended Practice No. 18R-97). The applicant must attach the Class 3 cost estimate to the Hub Development Plan template.

The cost section covers capital, operating, environmental, remediation and reclamation cost estimates. All cost estimates must be based on applicable Alberta proxies and provide sufficient justification to explain any deviation of costs from analogous Alberta projects such as the Quest, Alberta Carbon Trunk Line (ACTL), Clive or acid gas injections.

Applicants must also provide a detailed explanation of their service rates calculations and associated methodology. Finally, applicants must also provide adequate proof of their capabilities to raise the required funding to build and operate the hub. Such proof includes the applicant's credit rating, source(s) of capital, capital allocation percentages between equity and debt, and fundraising schedule. If the project is owned by a partnership or joint venture, a detailed governance structure is also required.

The applicant must have a Chief Financial Officer or delegate (such as a Finance Manager) sign the attestation statement on the Application Form regarding the financial and economic information being submitted.

Technical Evidence to Support Land Area Requested

The applicant must provide sufficient technical evidence, authenticated by the applicant's APEGA Responsible Member on the Application Form, to demonstrate that the areal extent and formation(s) requested in the application are congruent with the ultimate sequestration pore volume required to meet project needs. This must include the results of any investigations conducted since the execution of the evaluation agreement, and must be supported by relevant technical evidence (such as, but not limited to detailed structure, isopach/isochore maps, cross-sections, logs, pressure/injectivity testing, caprock analyses, fluid testing etc.) for each formation in each geographic area requested.

Spatial Data Format

Alberta Energy has prescribed the following requirements for the submission and formatting of mapping data associated with the application:

- Area boundaries must be represented by a polygon.
- Areas submitted as points or line features will not be accepted.
- Area boundaries must be derived off of the Alberta Township Survey.
- The polygons submitted must represent the application area in shape, size, and location.
- Applicant must specify the spatial reference of data provided (TTM, VTM, etc.)

The following file formats will be accepted:

- CAD datasets (.dgn, .dwg, .dxf)
- Keyhole Markup Language Files (.kml, .kmz)
- ESRI Shapefiles (.shp, .shx, .dbf, .pri)
- ESRI File Geodatabase (.gdb)

A shapefile is recommended and must include the four file types referenced above.

It is recommended that applicants package all files in .ZIP format to mitigate issues associated with emailing multiple large files.

Submission Instructions

Only applicants with active evaluation agreements are eligible to apply for a sequestration agreement. Any subsequent amendment applications may also be submitted within the evaluation agreement term, which if approved will result in the sequestration agreement being amended.

Application requirements for a carbon sequestration agreement will include, but are not limited to, the following items:

- Application Form
- Hub Development Plan
- Technical Evidence to Support Land Area Requested
- Spatial representation of the area applied for in the prescribed format

*See Requirements section for full requirements details.

The Carbon Sequestration Agreement Application must be submitted through the carbon sequestration



inbox carboncapture.energy@gov.ab.ca. Applicants will receive an email from Alberta Energy confirming receipt of the Carbon Sequestration Agreement Application.

Application Review Process

In the event a submitted application is incomplete, Alberta Energy will reject the application. Applicants can reapply once all required information is available.

Applicants will be notified when the application is under review and again when a decision is finalized. Alberta Energy anticipates application reviews to be completed within six months. However, this assumes that all required information has been received and there are no material deficiencies in the information provided in the initial submission.

Agreement Issuance

Currently, Carbon Capture and Storage (CCS) Tenure is manually administered. Therefore, Alberta Energy will prepare each Carbon Sequestration Agreement and send to the applicant for review. An applicant's review of the sequestration agreement is limited to manual inputs within the agreement (e.g., agreement holder, effective date, contact, etc.). No changes to the standard agreement template wording will be considered.

Additional information may be requested from the applicant in order to complete the agreement (e.g., official address for notices, signatory, etc.).

Once finalized, execution instructions will be provided to the applicant.

Fees/Rentals

If a Carbon Sequestration Agreement Application is successful, information will be provided to the applicant about fee payment.

Other Regulatory Requirements

The Alberta Energy Regulator (AER) is responsible for the review and approval of the following documents as part of its regulatory processes (e.g., Directive 065):

- Monitoring, Measurement and Verification Plan (MMV)

- Site Suitability Risk Assessment
- Closure Plan

For additional information on MMV plans, please refer to the [Monitoring, Measurement and Verification Principles and Objectives](#) document.

While these documents are not required as part of the Carbon Sequestration Agreement application, applicants must meet the AER's regulatory requirements and receive any necessary approvals required to commence carbon dioxide injection.

Contacts

Questions regarding the application process or information required as part of the application are to be directed to carboncapture.energy@gov.ab.ca. This email is actively monitored and Alberta Energy will respond within 48 hours.